



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,645	11/24/2003	Jong-Ho Lee	SWO-0005	4692

23413 7590 07/06/2005

CANTOR COLBURN, LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

EXAMINER

RAO, G NAGESH

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/720,645

Applicant(s)

LEE, JONG-HO

Examiner

G. Nagesh Rao

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 6/10/05
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claim 1 rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 4 of admitted prior art by the applicant in view of Yasoda (US 6,722,245 B2).

As shown by the applicant's admission of prior art in Figure 4, there enclosed is a drawing of a conventional molding apparatus (Page 5 of applicant's specification). The figure 4 drawing shows a frame (111), a die (121), a stripper

(141), a punch holder (151), a press slide (171), a ball screw (177) and a rotational servo motor (175).

The admitted prior art however lacks the specific teaching of replacing the rotational servo motor with a linear motor.

In an apparatus dealing with a pressing function, Yasoda 245 teaches a punching unit apparatus used for boring a pattern or hole into a material that easily spreads when a pressing force is applied. It is taught that the punching die's driving source is operated through an electric motor. The likes of this motor could be a servo, linear, stepping motor, or the likes of one (Column 2 Lines 19-26).

Therefore it would be obvious to one skilled in the art of press molding to substitute the likes of a servo motor with a linear motor, since they are seen as equivalent means for electro-mechanically driving the apparatus.

Furthermore it would then be an expected result to one skilled in the art to have to include a linear joint block, when replacing the servo motor with a linear motor, in order for the motor to have proper communication with the die, due to the motor's method of function, which is further understood by the ball screw (177) acting similar to a linear joint block as a connector that couples the motor to the die.

2. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Figure 4 of admitted prior art by the applicant in view of Yasoda (US 6,722,245 B2) in further view of Naito (US 4,977, 804).

With respect to claim 2, the aforementioned arguments apply. However they fail to teach the need for holes for discharging scrap material.

In a punch press apparatus, Naito 804 explains that it is known to want to discharge materials after being punched out by a die (Column 1 Lines 13-25).

Therefore it would be obvious to one skilled in the art of press molding involving a punch and die, to have a means such as a hole for discharging the scrap material punched out by the die. This would prevent clogging of material and speed up processing time, rather than having to open the machine to remove the scrap and then restart on a new piece of material.

3. Applicant contends that the combination of admitted prior art in view of Yasoda 245 does not constitute analogous art. Examiner disagrees and points out that Yasoda 245 relates to an apparatus dealing with a pressing function. Secondly examiner notes that Yasoda 245's reference is provided to show that there is an equivalency factor between linear and servo motors and that it is seen as a mere substitution of parts. Lastly, the argument put forth that Yasoda 245 does not teach

that the linear motor cooperating with the linear joint block is moot, because the purpose of Yasoda 245 as a secondary reference was to teach that it is well known in the art to substitute a servo motor with a linear motor in pressing function apparatuses, and that the admitted prior art showed a ball screw joint that acted as a linear joint block to couple the motor to the die.

Conclusion

4. Applicant's arguments filed 6/10/05 have been fully considered but they are not persuasive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Nagesh Rao whose telephone number is (571) 272-2946. The examiner can normally be reached on 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GNR


ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1300-1703

6/30/05